

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROV. FY
QSS Group, Inc.	NAS5- 99124 TASK NO. 329 AMENDMENT	710-632-83-01 -89	0 0

TASK TITLE: (NTE 80 characters; include Project name)

Systems Engineering Team Services

APPROVALS: (Type or print name and sign)

ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR)

Raymond L. Granata <i>Raymond L. Granata</i>	DATE August 1, 2000	ORG CODE 585	MAIL CODE 585	PHONE 301-286-3702
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BRANCH HEAD Howard Eiserike <i>Howard Eiserike</i>	DATE August 1, 2000	CODE 585	PHONE 301-286-7784
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CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) Robert S. Lehair, Jr. <i>Robert S. Lehair, Jr.</i>	DATE 8/4/00	CODE 560	PHONE 301-286 6588
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FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? (If YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)	CONTRACTING OFFICER'S QUALITY REP. Larry Moore	DESIGNATED FAM:
<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.	(To be completed by Contracting Officer) C.O. Requested Quote on: Date: AUG 7 2000
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Contractor will develop specification or statement of work under this task for a future procurement. ☒ NO ☐ YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. ☐ NO ☐ YES ☒ N/A

Government Furnished Property/Facilities: ☐ NO ☒ Yes - see list of GFP (off site only)

Onsite Performance: ☒ NO ☐ YES If yes: ☐ TOTAL ☐ PARTIAL
If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: ☒ NO ☐ YES

Highlighted Contract Clauses: (to be completed by Contracting Officer)

INCENTIVE FEE STRUCTURE (check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	No. 1	No. 2	XX No. 3	No. 4	No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

(To be completed by Contracting Officer)

The target cost of this task order is \$ _____.

The target fee of this task order is \$ _____.

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ _____.

The maximum fee is \$ _____.

The minimum fee is \$0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

SIGNATURE OF CONTRACTING OFFICER	DATE	TYPED NAME OF CONTRACTING OFFICER
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CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE

DATE

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QSS Group, Inc.	NAS5- 99124	329	

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

This is a follow-on to Task 121; uninterrupted transition is required.

See page 3.

PERFORMANCE SPECIFICATIONS:

See page 7.

APPLICABLE DOCUMENTS:

None.

TASK END DATE: 9/12/01

MILESTONES/DELIVERABLES AND DATES:

See page 9.

PERFORMANCE STANDARDS:

Schedule: On-time delivery/completion of the deliverables/milestones

Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Raymond L. Granata, building 23, room W351

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REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task: **329****Systems Engineering Team Services****INTRODUCTION**

This effort is in support of AETD, STAAC and other directorates as required systems engineering activities. The goal is to improve the effectiveness of overall AETD, STAAC and other directorate systems, including information systems. This goal will be achieved by working jointly with the Government to develop and promulgate strategies and initiatives selected to optimize overall system architectures and capabilities with respect to user and institutional requirements.

This work is to be accomplished through the activities of the Systems Engineering Team (SET). The SET functions as a multicontractor team providing expertise in systems engineering, systems management and technology management. This effort is described in detail in the following technical areas.

1. Systems Engineering Services
2. Systems Management Services
3. Technology Management Services

SECTION 1 -- ASSUMPTIONS

For the technical areas, the following assumptions apply unless otherwise stated.

1. Period of Performance - September 13, 2000 to September 12, 2001 for all activities except as noted.
2. Non-local travel may be required for some technical areas.
3. There are no significant risks on these activities.

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Task: **329****SECTION 2 -- WORK DESCRIPTION****2.1 Systems Engineering Services****WORK DESCRIPTION:**

The contractor shall provide services in support of the following aspects of systems engineering, including but not limited to:

1. Developing high level management plans, operational and system concepts, performing functional analysis, and conducting trade studies among alternative concepts. Where appropriate, defining architectures (including data and information system architecture) and models to support evolving systems engineering and management process. Evaluating all such concepts, architectures, and models against end-to-end goals and objectives.
2. Interfacing with NASA/GSFC customers and other NASA contractors to provide in-depth technical research, analysis, and evaluations to produce operations reports, develop and document concepts, conduct functional analysis of requirements, and assess project and implementation plans.
3. Facilitating the infusion of automation technology and knowledge management into missions and projects conducted at GSFC. This effort includes continuation of systems engineering activities related to the Collaborative Engineering Environment (CEE) element of the Intelligent Synthesis Environment (ISE) Program.
4. Identifying and cataloging systems engineering services, products and tools, and comparing them to equivalent commercially available services and products to analyze the cost benefit of using various degrees of government and commercial providers. This effort includes the update and maintenance of the Tools Inventory database.
5. Promoting the dissemination of relevant information between individuals and key organizations by organizing workshops and conferences and publishing papers, brochures, and other documentation. This effort includes services for systems engineering activities in the International Council on Systems Engineering (INCOSE), the AIAA, Knowledge Management Consortium International (KMCI), and SpaceOps symposia.

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Task: **329****2.2 Systems Management Services**

WORK DESCRIPTION:

The contractor shall provide services in support of the following aspects of systems management, including but not limited to:

1. Identifying specific initiatives to contribute to the achievement of AETD strategic goals, objectives, and long-range plans.
2. Applying case based reasoning technology to the Reusable Experience With Case-Based Reasoning (CBR) for Automating Lessons Learned (RECALL). This activity will continue management of the RECALL system including maintenance and addition of new lessons learned
3. Applying artificial intelligence (AI) technology to reduce the cost of operating multi-satellite or nano-satellite constellations. Incorporating intelligent agents (IA) in the interface of ground monitoring systems such as Genie-Gensa.

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Task: **329****2.3 Technology Management Services****WORK DESCRIPTION:**

The contractor shall provide services in support of the following aspects of systems management, including but not limited to:

1. Obtaining information from selected individuals, projects, missions, and organizations to develop a map of overall user needs and requirements. Organize, synthesize, and aggregate these overall requirements and needs and compare with various NASA/GSFC and commercial services and products. Develop technology roadmaps to evolve key capabilities.
2. Participating with the NASA Technology Planning and Integration Office (NTPIO) in the collection, evaluation, and selection of technology capabilities and products to be matured for future NASA missions.
3. Maintaining, populating and upgrading the Systems Engineering/Technology Management Database to support the brokering of mission and project needs with enabling technologies, processes and tools.
4. Conducting technology and mission needs data collection which consists of the following: a) Collect and characterize emergent technology efforts in order to determine the applicability to mission needs. b) Establish and maintain information exchange relationships with domain experts and user customers. c) Populate a centralized technology management database. d) Establish an expert team that knows how and who to contact for quality technology data. e) Develop and maintain customer satisfaction data.

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Task: **329****PERFORMANCE SPECIFICATIONS****Roles and Responsibilities**

This task is collaborative work with the government. A System Engineering Team (SET) Technical Area Owner (TAO) will monitor this work. The SET is led by the TAO and is composed of selected technical and management specialists (contractor and civil servants) who are individually assigned in accordance with their expertise to support the TAO in planning, preparing for, and implementing the work. The SET also has access to other corporate team resources if the need arises.

Evaluation Events and Criteria

The SET shall meet periodically at which time the work shall be evaluated by the TAO against schedule, quantity of deliverables, quality of deliverables and cost of the work performed.

It is expected that the SET will meet weekly or at the request of the TAO to discuss progress of the SET activities.

The following metrics are established for this effort:**1. Comprehensive System and Technical reports:**

Acceptable performance is that the ATR is satisfied that the material reflects the proper level of technical expertise and meets the objectives of the activity.

2. SET meeting activities:

Acceptable performance is that the ATR is satisfied that the contractor supported the meetings with the proper talent and adequately participated in the meeting activities. Also, that they recorded the group activities accurately and provide timely disseminated the minutes.

3. Technical Status Reports:

Acceptable performance is that the ATR is satisfied that the material accurately reflects the monthly activities and is timely disseminated.

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REQUEST FOR TASK PLAN / TASK ORDER**Contract NAS5-99124****Task: 329****4. Professional Papers presented:**

Acceptable performance is that the ATR is satisfied that the materials presented are technically challenging, relevant to the activities of this task plan, and done in a professional manner.

5. Analyses Performed:

Acceptable performance is that the ATR is satisfied that the studies performed meet the requirements of the activity, are completed in a timely manner, and reflect the level of technical professionalism required.

6. Software Products:

Acceptable performance is that the ATR is satisfied that the Software Products meet or exceed the performance specifications, are delivered in a timely manner, and are properly documented.

7. Presentation material:

Acceptable performance is that the ATR is satisfied that the materials are accurate, timely, and properly represent the technical subject.

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Task: **329****SCHEDULE OF DELIVERABLES**

- | | |
|-------------------------------------------------|-------------------------------------|
| a. Comprehensive Systems and Technology Reports | Quarterly |
| b. Systems Engineering Team Meetings | Weekly or as necessary |
| c. Technical Status Reports | Monthly, COB 15th day of each month |
| d. Cost Reports | Monthly |

NON-LOCAL TRAVEL

The following non-local travel has been identified for members of the SET:

- | | |
|------------------------------------------------|-----------------------|
| a. Annual Knowledge Management | New Orleans, La |
| World Summit and Exposition (1 person)(4 days) | December 2000 |
| b. INCOSE Winter Workshop (2 people)(5 days) | Mesa, AZ January 2001 |

Other non-local travel may be requested by the TAO on an as needed basis.

GOVERNMENT FURNISHED PROPERTY (GFP)

The following software products:

1. CBR-Express Generator
2. CBR-Express Professional Author
3. CasePoint web server